

IN THE CLAIMS:

1. (Currently Amended) ~~A method of managing a computer information database that contains computer profile data for computers, the method including~~ A method of operating a profile group managing server for managing a computer information database comprising the steps of:

A. ~~determining, by said profile group managing server, a multiple node tree structure of groups for the~~ a set of computers, in which each node is a group level, and a top level is a root, based on primary grouping criteria and secondary grouping criteria that correspond to selected computer profile data for each computer, said computer profile data including one or more of hardware and software configuration, hot fixes, user defined entries and performance data;

B. ~~including, specifying in a group mapping table in the computer information database, one or more fields for the primary grouping criteria and one or more fields for the secondary grouping criteria, wherein said secondary grouping criteria may be unrelated to said primary grouping criteria, and including in those fields, in respective table records, values corresponding to the selected computer profile data that are utilized in the primary grouping criteria and the secondary grouping criteria with the values associated with either or both of the primary grouping criteria and the secondary grouping criteria being ranges that extend between a selected high value and a selected low values, wherein said ranges are inclusive and include the high value, the low value and values therebetween wherein said values therebetween include all values that are less than the high value, but greater than the low value; and wherein certain specific values for said primary grouping criteria and said secondary grouping criteria together uniquely identify one or more particular computers;~~

C. ~~further including specifying, in the respective table records, information that identifies the groups to which the computers that satisfy the primary and secondary criteria are assigned;~~

D. ~~receiving, at said profile group managing server, from each computer in the set of computers, for inclusion in the database, computer profile data from a plurality of computers;~~

36 E. for the profile data received from a given computer, the profile group managing
37 server performs the following:

38 extracting the selected profile data that are utilized in the primary groupings
39 and the secondary groupings,

40 querying the group mapping table to determine if the extracted profile data
41 correspond to or fall within the ranges of the respective values that are included in the
42 primary grouping fields and the secondary grouping fields in any of the records in the table,
43 and

44 if the query results in no records, assigning the computer to a default group,
45 if the query results in one table record, assigning the computer to the group
46 that is named in the record,

47 if the query results in multiple table records that include secondary low
48 values, assigning the computer to the group that is named in the record that is in a first
49 predetermined position in the order in which the records are returned, or

50 if the query results in multiple records and there are no corresponding
51 secondary low values in the records, assigning the computer to the group that is named in the
52 record that is in a second predetermined position in the order in which the records are
53 returned; and

54 F. manipulating the computer profile data from the database and producing, for a
55 selected group level, reports that contain summaries of certain or all of the attributes of the
56 computers that are in the selected group level or below in the tree.

1 2. (Original) The method of claim 1 wherein one or more table records includes secondary
2 grouping values set to NULL.

1 3. (Previously Presented) The method of claim 1 wherein the respective values associated
2 with the primary grouping criteria are ranges and the step of determining if the extracted data
3 correspond to the respective values further includes determining if the corresponding

4 extracted data falls ~~within one~~ below a high limit and above a low limit of the primary
5 grouping ranges.

1 4. (Previously Presented) The method of claim 3 wherein the values associated with the
2 secondary grouping criteria are ranges and the step of determining if the extracted data
3 correspond to the values further includes determining if the corresponding extracted data of
4 interest falls below a high limit and above a low limit of the within one of the secondary
5 grouping ranges.

1 5. (Currently Amended) The method of claim 1 wherein ~~the step of querying further includes~~
2 comprises determining if the extracted data corresponds to the primary grouping criteria and
3 a secondary low value of NULL or the empty string.

1 6. (Previously Presented) The method of claim 1 wherein the primary and secondary
2 grouping criteria correspond to user-specified values of the selected computer profile data.

1 7. (Currently Amended) ~~A method of managing a computer information database that~~
2 ~~contains computer profile data for computers, the method including~~ A method of operating a
3 profile group managing server for managing a computer information database comprising:
4 the steps of:

5
6 A. determining, by said profile group managing server, a multiple node tree structure
7 of groups for the computers, in which each node is a group level, and a top level is a root,
8 based on primary grouping criteria that correspond to ranges of values of selected computer
9 profile data for each computer, said computer profile data including one or more of hardware
10 and software configuration and performance data;

11 B. ~~including, specifying~~ in a group mapping table in the computer information
12 database, fields for the ranges of values of the selected computer profile data that are the
13 primary grouping criteria, wherein said ranges are inclusive and include a selected high
14 value, a selected low value, and values there between, wherein said values there between

15 include all values that are less than the high value, but greater than the low value; and
16 including in those fields, in respective table records, high and low values for the ranges of the
17 selected computer profile data wherein certain specific values for said primary grouping
18 criteria and said secondary grouping criteria together uniquely identify one or more particular
19 computers;

20 C. further including, in the table records, information that identifies the groups to
21 which the computers that satisfy the primary grouping criteria are assigned;

22 D. receiving, at said profile group managing server, from each computer in the set of
23 computers, for inclusion in the database, computer profile data from a plurality of
24 computers for that particular computer;

25 E. for the profile data received from a given computer, the profile group managing
26 server performing the following:

27 extracting the selected profile data that is utilized in the primary grouping;
28 querying the group mapping table to determine if the extracted data fall within the
29 ranges of values that are included in the primary grouping fields in any of the table records;
30 and

31 if the query results in no records, assigning the computer to a default group;

32 if the query results in one table record, assigning the computer to the group that is
33 named in the record; or

34 if the query results in multiple table records, assigning the computer to the group that
35 is named in the record that is in a first predetermined position in the order in which the
36 records are returned; and

37 F. manipulating the computer profile data from the database and producing, for a
38 selected group level, reports that summarize the attributes of the computers that are in the
39 selected group level or below in the tree.

1 8. (Currently Amended) The method of claim 7 further ~~including the steps of~~comprising:

2 including, in the table, fields that correspond to a range of values for computer profile
3 data that are selected as secondary grouping criteria to assign the computers to groups for

profile data reporting, and including in the fields in respective table records high and low values for the secondary grouping computer profile data of interest, and

for the profile data from a given computer

further extracting data that correspond to the computer profile data selected for the secondary grouping criteria,

further querying the table to determine if the further extracted data fall within the secondary grouping criteria ranges included in the table records, and

if the query results in one table record, assigning the computer to the group that is named in the record,

if the query results in multiple table records that include secondary low values, assigning the computer to the group that is named in the record that is in a second predetermined position in the order in which the records are returned,

if the query results in no records, assigning the computer to a default group, or

if the query results in multiple records and there are no corresponding secondary low values in the records, assigning the computer to the group that is named in the record that is in a third predetermined position in the order in which the records are returned.

9. (Currently Amended) The method of claim 8 wherein ~~the step of~~ querying further ~~includes~~ comprises determining if the extracted data corresponds to the primary grouping criteria and a secondary low value of NULL or the empty string.

10. (Previously Presented) The method of claim 1 wherein the first predetermined position in the order of the records is the first record found and the second predetermined position in the order of records is the last record found.

11. (Previously Presented) The method of claim 8 wherein the second predetermined position in the order of the records is the first record found and the third predetermined position in the order of records is the last record found.

1 12. (Cancelled)

1 13. (Currently Amended) The method of claim 12-1 wherein ~~the step of~~ grouping further
2 ~~includes~~ comprises re-grouping the plurality of computers in groups in accordance with
3 different user-specified primary and secondary grouping criteria by altering the ranges.

1 14. (Currently Amended) The method of claim 12-1 wherein ~~the step of~~ grouping further
2 ~~includes~~ comprises grouping the plurality of computers in groups in accordance with
3 primary and secondary grouping criteria that correspond to computer profile data that
4 represents selected physical locations of users.

1 15. (Currently Amended) The method of claim 14-1 wherein ~~the further step of~~ grouping
2 ~~includes~~ comprises re-grouping the plurality of computers in groups in accordance with
3 primary and secondary grouping criteria that correspond to computer profile data that
4 represents selected structures within the underlying organization of users.

1 16. (Cancelled)

1 17. (Cancelled)

1 18. (Cancelled)

1 19. (Currently Amended) The method of claim 1 wherein ~~the further step of~~ grouping
2 ~~includes~~ comprises re-grouping the plurality of computers in groups in accordance with
3 primary and secondary grouping criteria that correspond to other selected structures
4 within the underlying organization of ~~users~~ a company.

20. (Currently Amended) A computer readable storage medium embodying a profile group managing server having stored thereon and running profile group managing software for executing a method of managing configured as a database management system for producing reports of attributes of collections of computers using computer profile data contained in a database, the system including by executing instructions for performing the steps comprising:

A. a profile group managing server programmed with instructions collecting means for:

A₁ collecting, at a profile group managing server, profile data for a given computer in a set of computers, into the database; which is retained in computer storage media;

B. a profile group manager running on an associated computer for

grouping the computers into a specified tree-structure of groups-groups in the database in which each node of the tree is a group level, and a top level is a root, based on primary and secondary grouping criteria that correspond to respective values of selected computer profile data with the values associated with either or both of the primary grouping criteria and the secondary grouping criteria being ranges that extend between a selected high value and a selected low values, wherein said ranges are inclusive and include the high value, the low value and values therebetween wherein said values therebetween include all values that are less than the high value, but greater than the low value;

wherein certain specific values for said primary grouping criteria and said secondary grouping criteria together uniquely identify one or more particular computers, wherein said groupings in said multiple node tree reflect at least one of a company's organizational structure and its underlying physical set up;

C. for the profile data received from a given computer, the profile group managing server performs the following:

28 extracting the selected profile data that are utilized in the primary
29 groupings and the secondary groupings,
30 querying the group mapping table to determine if the extracted profile data
31 correspond to or fall within the ranges of the respective values that are included in the
32 primary grouping fields and the secondary grouping fields in any of the records in the
33 table, and

34 if the query results in no records, assigning the computer to a default
35 group,

36 if the query results in one table record, assigning the computer to the
37 group that is named in the record,

38 if the query results in multiple table records that include secondary low
39 values, assigning the computer to the group that is named in the record that is in a first
40 predetermined position in the order in which the records are returned, or

41 if the query results in multiple records and there are no corresponding
42 secondary low values in the records, assigning the computer to the group that is named in
43 the record that is in a second predetermined position in the order in which the records are
44 returned; and

45 ~~C. the profile group manager maintains the group information in the database; in~~
46 ~~computer storage media;;~~

47 D. manipulating the data in the database to produce reports that summarize the
48 attributes of the computers in a given group level and the levels below on the tree;; and

49 E. providing the reports to a user.

1 21. (Cancelled)

1 22. (New) A system for managing computer profile data, comprising:

2 a profile group managing server configured to retrieve computer profile data from
3 computers;

a set of computers, each computer being configured with a client profile software module that maintains profile data for that computer, and uploads computer profile data to said profile group managing server; and

a computer information database configured with a mapping table having at least three fields including a primary profile value to match field, a secondary profile value to match field, and a group path field, wherein said group profile managing server determines how to include a computer in a group by extracting from uploaded profile data, that data which corresponds to primary grouping criteria and secondary grouping criteria being ranges that extend between a selected high value and a selected low value, wherein said ranges are inclusive and include a high value, a low value and values therebetween wherein said values therebetween include all values that are less than the high value, but greater than the low value.

23. (New) The method as defined in Claim 1 wherein said hardware component information includes one or more of manufacturer, system BIOS, CPU, bus, memory, hard disks, local and shared, logical and physical, tape drives, video cards, sounds cards, printers, network and operating systems.

24. (New) The method as defined in Claim 1 wherein said software version information about applications includes one or more of manufacturer, product name, version number and install directory and said performance data includes one ore more of network activity, CPU utilization, number of reboots, and hard drive SMART failures.

25. (New) The method as defined in claim 1 wherein said group profile managing server organizes the set of computers to reflect the organization of the company, and underlying physical set up, such as by using identifiers including at least one of PC Name and corporate department including one of sales, marketing, headquarters and location.

26. (New) The method as defined in claim 25 wherein said PC Names include three letters followed by four digits, said three letters denoting organizational responsibilities of the computer's user, such that said numbers together uniquely identify one or both of a particular computer and the computer's user.